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## Breeding of six Palaearctic birds in southwest Mauritania

by P. W. P. Browne

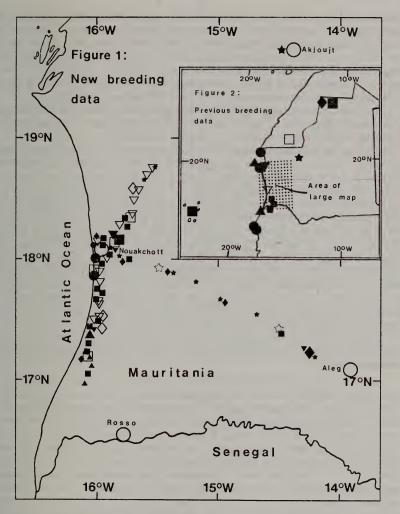
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While living in Nouakchott during the years 1978–1980, I discovered evidence of the breeding of the Kentish Plover *Charadrius alexandrinus*, Cream-coloured Courser *Cursorius cursor*, Gull-billed Tern *Sterna nilotica*, Hoopoe Lark *Alaemon alaudipes*, Great Grey Shrike *Lanius excubitor* and Desert Sparrow *Passer simplex* in parts of southwest Mauritania where breeding has not previously been reported. These species appear to reach the southern extremity of their breeding range in or near this area. The localities are shown in Figure 1. For comparison, breeding data of other authors are given in the inset map Figure 2.

CHARADRIUS ALEXANDRINUS. Kentish Plovers are present the whole year in Southern Mauritania and in 1978 maximum numbers were seen in March and April (monthly counts not made in other years). On passage, they were sometimes seen inland, but in the breeding season only observed on the coast near Nouakchott. On 28 May 1978, I found a nest of 3 eggs about  $1\frac{1}{2}$ km from the ocean (18°02'N, 16°00'W) near an excavated saline pool. In 1979 I saw one chick with 2 adults there on 8 July, and there was a pair of adults with 2 fullgrown young on 14 June 1980. On 9 June 1979, I saw 2 chicks with a party of 4–5 adults by another excavated saline pool about  $\frac{1}{2}$  km nearer the ocean. The other nesting location was some 18 km further south (17°53'N, 16°02'W), by a natural saline lake and series of pools just behind the dunes, 200–400 m from the ocean. On 14 June 1980, I saw one small chick with an adult, 2 chicks almost able to fly with a pair of adults, and another pair of adults with 2 fullgrown juveniles.

It has long been known that  $\overline{C}$ . alexandrinus breeds on the northern coast of Mauritania. Bird (1937) reported it at Nouadhibou (c. 21°N) and Trotignon (1980) on the Banc d'Arguin (c. 19°30'N). It has recently been discovered nesting on the coast of Senegal, at c. 14°10'N on 13 July 1970 (Von Westenhagen *in* Morel 1972) and at 13°55'N on 19 May 1979 (Prevost *in* Morel 1980). The Nouakchott observations therefore fill a gap in its known range, and it is to be expected that there are other undiscovered breeding places on the Mauritanian coast.

CURSORIUS CURSOR. During 1978, I thought the Cream-coloured Courser was a winter visitor only to southwest Mauritania, for I saw it from January to March and not again till August. This impression was reinforced by literature covering the region (Heim de Balsac & Mayaud 1962, Mackworth-Praed & Grant 1970). However, in 1979, as I widened the area of my explorations, I found that the species occurred throughout the summer. On 16 June 1979, 12 km northeast of Nouakchott ( $18^{\circ}10'N$ ,  $15^{\circ}54'W$ ), I saw 2 adults with a juvenile not quite as big as themselves, somewhat spotted and without grey on the crown. Again, a juvenile as big as the adults was seen there on 14 October 1979. On 15 July 1979 at another location ( $18^{\circ}21'N$ ,  $15^{\circ}54'W$ ) I saw a juvenile with adults and yet another ( $\frac{3}{4}$  adult size) at  $18^{\circ}09'N$ ,  $15^{\circ}55'W$  on 29 July 1979. All these juveniles could fly, but it should be noted that adults had been seen in these areas for some weeks prior to the appearance of the juveniles.



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Species	Eggs &/or chicks	Other breeding evidence	Present in breeding season
Kentish Plover	•		•
<b>Cream-coloured Courser</b>			-
Gull-billed Tern			
Hoopoe Lark		$\nabla$	•
Great Grey Shrike	•	$\diamond$	•
Desert Sparrow	*	☆	*
Town		0	

In 1980, Cream-coloured Coursers were again persistently seen during the spring and summer. On 18 May 1980, in the company of Mr. Bruce Heath, I found 2-3 chicks unable to fly, with 2 adults, at 18°10'N, 15°54'W. One chick was caught and photographed. On 7 June 1980, halfway between Nouakchott and Rosso (on the new road, 17°12'N, 16°05'W), I saw a party of 5 adults and 2 fullgrown young. There was a fullgrown juvenile with an adult near the coast at 17°53'N, 16°02'W on 14 June 1980.

Altogether, during 1979 and 1980, Cream-coloured Coursers were seen at 23 locations between 17°04'N and 18°21'N during the breeding season. Juveniles or chicks were found at 6 of these locations.

This represents a considerable extension southwards of the known breeding range of this species on the mainland of West Africa. The previous furthest south proof of breeding seems to be that obtained by Heim de Balsac in Zemmour (around  $25^{\circ}30'$ N,  $11^{\circ}04'$ W) in 1947 (*loc. cit.*), c. 850 km NNE of where proof of breeding was obtained in 1980. However, he also reports that Valverde saw flying young in southern Spanish Sahara, about 22°N, and the species is resident in the Cape Verde Islands around  $15^{\circ}-17^{\circ}$ N (Serle & Morel 1979). Cream-coloured Coursers were previously observed in the breeding season as far or even further south than in my records, though with no sign of breeding: on 20 April 1947 by Heim de Balsac (*loc. cit.*) halfway between Nouakchott and Rosso in Mauritania (on the old road,  $17^{\circ}13'$ N,  $16^{\circ}04'$ W) and halfway between Rosso and St. Louis in Senegal ( $16^{\circ}16'$ N,  $16^{\circ}06'$ W); on 30 May 1960 by Dr. G. Morel (pers. comm.) at El Rhars, Mauritania ( $16^{\circ}46'$ N,  $15^{\circ}36'$ W).

The habitat favoured by these birds in 1978–1980 was flat steppe, usually without sand dunes, but with frequent low bushes (*Maerua crassifolia*, *Tamarix senegalensis*, etc.)

STERNA NILOTICA. The Gull-billed Tern is known to breed in the spring in quite large numbers on the Mauritanian coast at the Banc d'Arguin, c.  $19^{\circ}30'N$  (some 1600 pairs in 1978—Trotignon 1980). It was also found to be laying in May and June 1972 on an island just south of St. Louis on the coast, c.  $15^{\circ}50'N$  (Latour 1973). I have often observed it flying over the ocean along the coast of Mauritania, but the birds referred to here were seen inland. They occurred in the rainy season, end June to early October, in 1978 and 1979. They appeared to be hawking for insects over the steppe and were sometimes seen in considerable numbers (about 500 together on 8 October 1978).

On 24 September 1978, c. 80 km south of Nouakchott  $(17^{22})$ , 16°04'W), I found 8 adults by a lake of about 1 km by  $\frac{1}{2}$  km, created by the rain. Some earth banks formed an island and on these I located two Gullbilled Terns' nests, one empty and one with a single egg. There were 10 birds here on 8 October 1978. In 1979 there was not sufficient water to form a lake.

The interest of this site lies not only in its inland location (c. 6 km from the ocean) but also in the fact that these birds had adopted the tropical rainy season nesting pattern, contrary to the coastal birds which nest in the spring, as is usual for this species in Palaearctic regions.

ALAEMON ALAUDIPES. The Hoopoe Lark was recorded as occurring, and indeed nest building was reported, as far south as Nouakchott (18°05'N) by Heim de Balsac & Mayaud (*loc. cit.*). I recorded this species in song at many

locations during the years 1978-1980 between c.  $18^{\circ}45$  'N (89 km northeast of Nouakchott) and  $17^{\circ}30$ 'N (64 km south of Nouakchott). I did not explore further north, but went much further south and did not see the bird at all south of  $17^{\circ}15$ 'N.

On 27 April 1980, I found a nest with one egg (bird sitting) at 18°10'N, 15°54'W (12 km northeast of Nouakchott). It was in the top of a *Maerua* crassifolia bush about 50 cm high, on flat bare steppe with little vegetation. The nest still had one egg on 28 April; on 1 May it was empty.

I can find no other definite proof of breeding in Mauritania apart from a nest discovered on the Banc d'Arguin (Trotignon 1980). If it is assumed that frequent song and song flights indicates breeding, then it seems likely that this species breeds as far south as 17°30'N.

LANIUS EXCUBITOR. During 1978, I thought that the Great Grey Shrike was only a winter visitor to the Nouakchott area, as I did not see it in the summer months. However, on 27 July 1979, I saw 3 juveniles south of Nouakchott  $(17^{\circ}30'N, 16^{\circ}02'W)$ , on 5 August 1979 one juvenile  $(17^{\circ}33'N, 16^{\circ}01'W)$ and on 30 September 1979 2 juveniles with an adult northeast of Nouakchott  $(18^{\circ}41'N, 15^{\circ}37'W)$ . During the summer of 1980, I saw adults in several places. There were again juveniles around  $17^{\circ}30'N$ ,  $16^{\circ}02'W$  on 10 July and on 20 July 1980 I found a nest with a bird sitting on 4 eggs near Aleg  $(17^{\circ}15'N, 14^{\circ}16'W)$ .

The only previous breeding records for Mauritania appear to be those of Heim de Balsac (*loc. cit.*) who recorded in 1947 several nests in Zemmour (c. 25° 30'N, 11°04'W) in which eggs were laid January-March. Evidently in southern Mauritania the species breeds during the rainy season and there is an influx in the winter months. The race I observed was *elegans*, since the rump was grey, not white.

**PASSER SIMPLEX.** During 1978 and 1979, I saw little of the Desert Sparrow, as most of my activities were near the coast or near the Senegal River. However, I did find the species occasionally along the roads leading ESE and NE from Nouakchott. On 25 February 1979, with Dr. and Mrs. G. Morel, I visited Akjoujt and just to the west of the town (19°44'N, 14°28'W), we found 2 nests of the species. Adults were bringing food to the nests and young could be heard calling inside.

During 1980 I made more trips to the ESE from Nouakchott and found Desert Sparrows at many points along this road, starting about 14 km from the coast, and continuing at least as far as  $17^{\circ}15'N$ ,  $14^{\circ}16'W$ . They were in small groups of up to a dozen, and in many cases in the same area as the Sudan Golden Sparrow *Passer luteus*. There were numerous nests (between 50 and 300 per square km) which may have belonged to either species, located in *Balanites aegyptiaca* and *Acacia* sp. bushes or low trees. Most nests were unoccupied, but on 20 July 1980 at  $17^{\circ}57'N$ ,  $15^{\circ}28'W$ , a female was seen bringing nesting material and at  $17^{\circ}25'N$ ,  $14^{\circ}31'W$ , a pair were flying around and into a finished but empty nest. The habitat of the species was sandy steppe, lightly bushed with the thorny trees mentioned. The birds also occurred around isolated buildings and in the town of Boutilimit ( $17^{\circ}33'N$ ,  $14^{\circ}42'W$ ). I have not seen the species nearer than 14 km from the coast. In the coastal strip, there is a preponderance of non-thorny bushes (*Salvadora persica*, *Tamarix senegalensis*, *Euphorbia balsamifera* and *Maerua crassifelia*).

Previous records of breeding of this species in Mauritania were only from the Adrar (north of 20°N) by Heim de Balsac (loc. cit.).

OTHER SPECIES. I have recorded during their normal breeding season 28 other species in southwest Mauritania whose normal breeding range lies further north. Of these, 4 species have been known to breed in Mauritania, with some evidence but no proof of breeding near Nouakchott:- Spotted Sandgrouse Pterocles senegallus (flocks observed coming to Nouakchott from north to drink all months except August and October-December, when I was unable to visit the drinking hole); Bar-tailed Desert Lark Ammomanes cincturus (seen all times of year along road from Nouakchott to the NE; flying juveniles around 18°41'N, 15°40'W on 15 July 1979); Brown-necked Raven Corvus ruficollis (throughout the year, common to 17°N, scarce further south); Olivaceous Warbler Hippolais pallida (summer visitor April-July; pairs observed and song heard at Nouakchott; netted birds referred to race opaca with bill width 5.5 mm at base—Williamson 1976).

Discussion. The evidence of breeding presented in this paper indicates extensions of the known breeding range of 4 species: Cream-coloured Courser, Hoopoe Lark, Great Grey Shrike and Desert Sparrow. It is tempting to correlate this with the recent drought in the Sahel, which might be expected to bring desert species further south. However, I do not believe the evidence is very strong that there has been an extension south of the *real* breeding range of these species. The apparent extension may well be due to the greatly increased volume of observation in recent years. I have examined all the published and all the known unpublished ornithological data for the area of Mauritania shown on the large map (except Banc d'Arguin), and conclude that at least 4 times as much field observation and recording (c. 550 hours) was done by me in the years 1978-1980 as had been carried out in all the preceding years. This is partly thanks to the improved tarred road system built since about 1970, but also to the fact that I resided at Nouakchott and had enough free time to make these observations.

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